

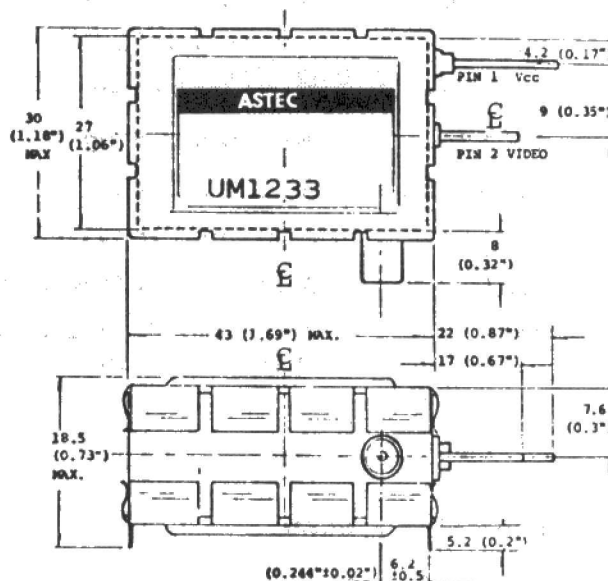
## UM1233E36

### HIGH PERFORMANCE UHF MODULATOR FOR COLOUR AND INTERCARRIER SOUND APPLICATIONS



#### FEATURES:

- \* LOW RADIATION AND HARMONICS
- \* GOOD MODULATION LINEARITY AND STABILITY
- \* LOW SUBCARRIER INTERMODULATION
- \* PRETUNED VISION CARRIER E36
- \* SUPPLY VOLTAGE RANGE  $5V \pm 0.2V$
- \* LOW CURRENT DRAIN 6MA
- \* 75 $\Omega$  OUTPUT FROM A STD PHONO SOCKET
- \* COMPACT RUGGED DESIGN FOR PCB INSERTION



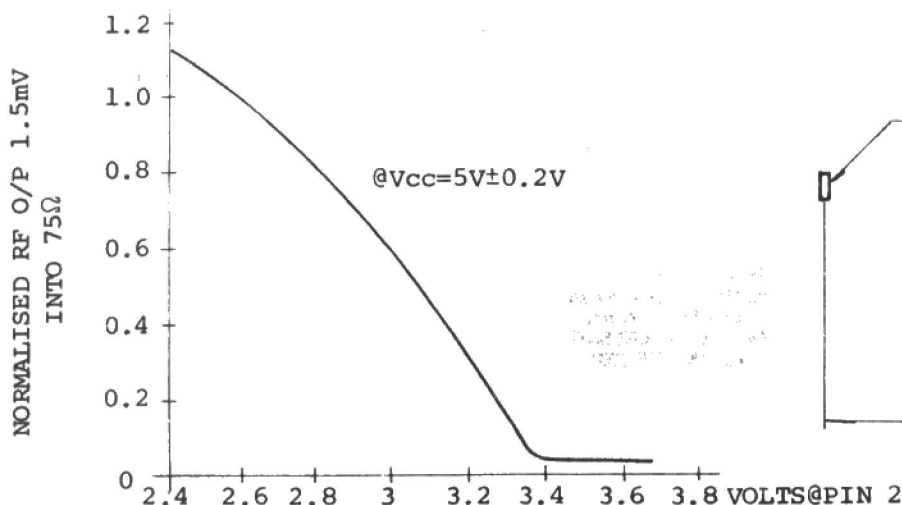
The UM1233 is a high performance modulator featuring low radiation and harmonics in line with the new European specifications.

The UM1233 is primarily intended for use in colour TV games and computer graphics with employ intercarrier sound.

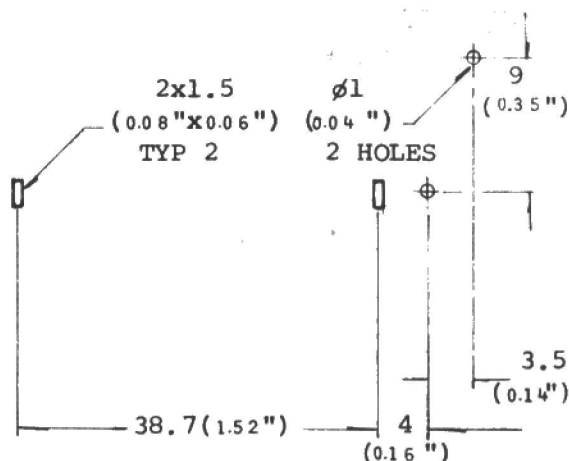
The UM1233 has good modulation depth, bandwidth and subcarrier intermodulation figures. Good subcarrier intermodulation performance minimises the On Screen Bar Pattern due to 920 KHz or 1.07 MHz subcarrier beats.

The UM1233 has negligible spurious FM which makes it ideal for SECAM applications.

#### TYPICAL TRANSFER CHARACTERISTIC



#### RECOMMENDED PCB HOLE CENTRES



NOTE: 1. ALL DIMENSIONS ARE IN MM. (INCHES ARE IN BRACKETS)

2. TRANSFER CHAR. IS DEPENDANT ON Vcc

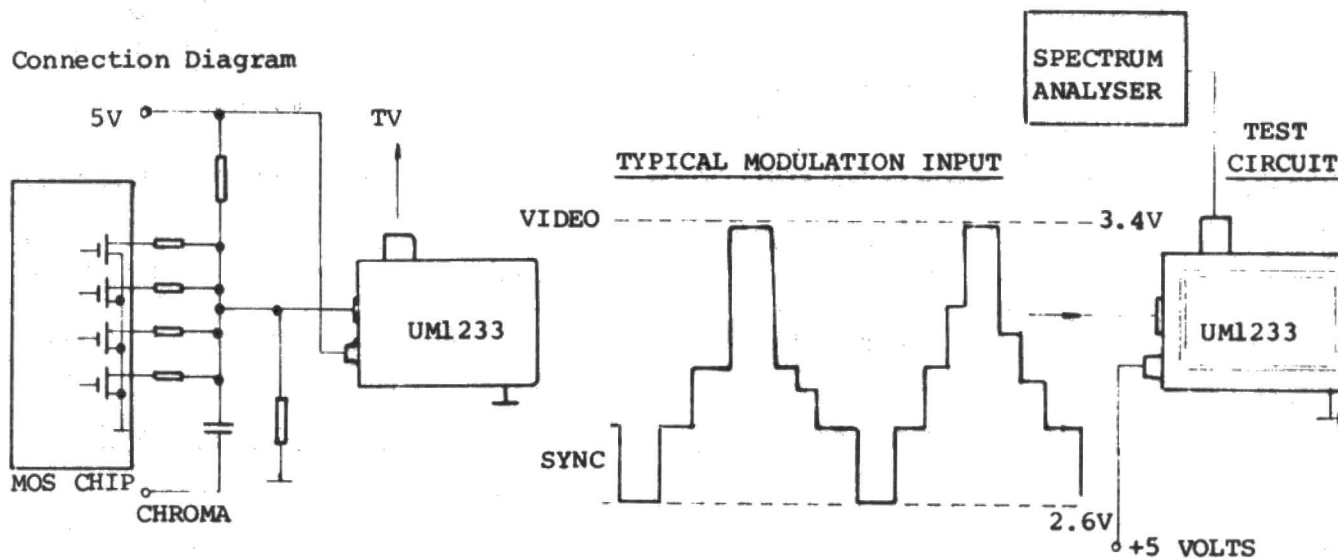
# UM1233 CHARACTERISTICS

Vcc = 5.0±0.2V

Ta = 25°C

SYMBOL	DESCRIPTION	TYP.	UNIT
Fc (E36)	Vision Carrier Ch. E36	591.25±5	MHz
Icc	Supply Current	6.0	mA
Vo (HI)	RF Output, Vmod = 2.6V	1.5	mV
Vo (LO)	RF Output, Vmod = 3.4V	-20	dB +6
BW	3dB Bandwidth	8	MHz
Vo (sp)	Spurious Output	<-30	dB wrt Vo (HI)
Vosc Min	Oscillator Stop Voltage	3.5	Volts
Video Zin	Modulator Input Impedance	1.5K	Ohms @ Vo (HI)
Zo	RF Output Impedance	75	Ohms
VSWR	Voltage Standing Wave Ratio	<2.0	
ΔFc	Frequency Stability Against Vcc Change in ± 1V	±1.5	MHz

Connection Diagram



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